

OPERATION MANUAL



LAB-LINE®

CHROMATOGRAPHY REFRIGERATORS

MODELS 3790, 3793, 3796

3793C, CR, P, V*

*(Includes Casters, Chromatography Rod,
Access Port, Vapor-Proof Duplex Outlet)

LAB-LINE INSTRUMENTS, Inc.

DESIGNERS AND MANUFACTURERS

15th and Bloomingdale Avenues
Melrose Park, IL 60160-1491
Call Toll Free: 1-800-LAB-LINE
In Illinois: (708) 450-2600
Telex: 6871028 LBLIN UW
Fax: (708) 450-0943

We are pleased with your choice of LAB-LINE INSTRUMENTS for your equipment needs. For maximum value and ease of start-up, please proceed as follows:

1. Inspect the carton and contents for shipping damage. Notify the carrier immediately if damage is found.
2. Use the "ACCESSORY CHECK LIST" when unpacking to verify that the complete unit has been received. Do not discard packing material until everything is accounted for.
3. Read this Operation Manual thoroughly before deciding on an appropriate location for the unit. You must consider the availability of power, water and/or gas hook-ups, drains and other unit requirements, as well as user convenience.
4. Carefully follow directions in the "INSTALLATION" section of this manual.
5. Insist that each operator of the unit is familiar with the "OPERATION" section of this manual.
6. Fill out the WARRANTY REGISTRATION CARD and mail it in to Lab-Line Instruments, Inc. within seven business days after receiving the unit.
7. Keep this manual in a safe location for ready reference to the "OPERATION" and "MAINTENANCE" sections when needed.
8. If, after reading this manual, you have any difficulty with installation, operation or maintenance, please call:

LAB-LINE CUSTOMER RELATIONS DEPARTMENT
(708) 450-2600 (in Illinois)
1-800-LAB-LINE (elsewhere)

ALL RIGHTS RESERVED

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DANGER

DO NOT USE IN THE PRESENCE
OF FLAMMABLE OR COMBUSTIBLE
MATERIALS OR EXPLOSIVE
GASES.

FIRE OR EXPLOSION MAY
RESULT, CAUSING DEATH OR
SEVERE INJURY.

LAB-LINE CHROMATOGRAPHY REFRIGERATORS

Lab-Line Chromatography Refrigerators are manufactured with the finest materials for long life and under rigid quality controls. At the same time, they require a minimum amount of care to achieve years of trouble-free service.

CARE AND MAINTENANCE

Chromatography Refrigerators will provide years of superior performance, if you follow these simple suggestions.

1. Condenser

If you keep the condenser clean, you will minimize service and lower your costs for electric power.

The condenser is accessed by removing the louvered grill on the front of the Chromatography Refrigerator. Although your Lab-Line Chromatography Refrigerator uses a minimum amount of electricity because of superior insulation in the cabinet and doors, it is very important to keep the condenser clean. The cleaner the condenser, the less the unit will run.

Cleaning the condenser should be done when needed, depending on local conditions and your location in particular. Use compressed air to blow the dust and grime from the condenser. A stiff brush can also be used but you must be able to see through your condenser.

2. Voltage

When your Lab-Line Chromatography Refrigerator is installed, the installer should check your wiring to determine that you have adequate current to operate the refrigeration unit properly. Under no circumstances should additional electrical loads be added between the power source and the Chromatography Refrigerator.

Do not plug in other electrical units to the same wall outlet your Chromatography Refrigerator is connected to or plug electrical units on the same circuit.

Do not use an extension cord to connect unit to power source.

3. Cleaning the Cabinet

Do not use bleaches or cleaners containing abrasives or halogen compounds (chlorine, etc.).

The exterior may be wiped clean with soap and water.

Interior: Do not use harsh cleansers on any surface. The interior of the Chromatography Refrigerator should be cleaned periodically and we recommend a mild solution of baking soda and water which will help reduce any inherent odors.

4. Replacement Parts

Lab-Line maintains a record of the serial number of your Chromatography Refrigerator. If a part is needed for your Refrigerator, all that you have to do is furnish the serial number of your Refrigerator to Lab-Line with a description of the part.

INSTALLATION INSTRUCTIONS - SWING DOORS

Do Not Unblock the Doors Until the Refrigerator Is In Its Final Location.


1. Remove the outer packing (cardboard and bubbles or styrofoam corners and clear plastic).
2. Move the Chromatography Refrigerator as close to the final location as possible before removing the wooden skid.
3. Remove the tape that is securing the wooden frame to the bottom of the doors. Remove the skid by carefully laying the cabinet on its back. First, fold the cardboard packing (or use a 2 x 4) and place near the bottom of the Refrigerator in the rear. Remove the skid bolts with a 9/16" wrench.
4. Remove the levelers from the drain pan (accessible from rear cabinet). Install one leveler in each leveler plate on the underside of the Refrigerator. Thread the levelers all the way in. Remove the electric cord from the rear of the cabinet.
5. Move the Refrigerator to its location. Adjust the levelers or shims if necessary. The Chromatography Refrigerator should be leveled front to back and side to side with a level. Place a level in lower channel in which doors slide. To insure proper ventilation for the compressor, keep the cabinet 1" from rear wall. (The warranty is void if ventilation is insufficient).
6. Remove all other tape securing the doors and the blue foam blocks (approximately 1" x 3" x 1") that are between the door and the Chromatography Refrigerator. One foam block is located on each side of the door frame.

7. The compressor is ready to operate. Connect the Refrigerator to an electrical power source providing at least 115 volts. The temperature control should be #5. If the Refrigerator is disconnected or shut off, wait 5 minutes before starting again. Test for voltage. There must be 115 volts at all times.

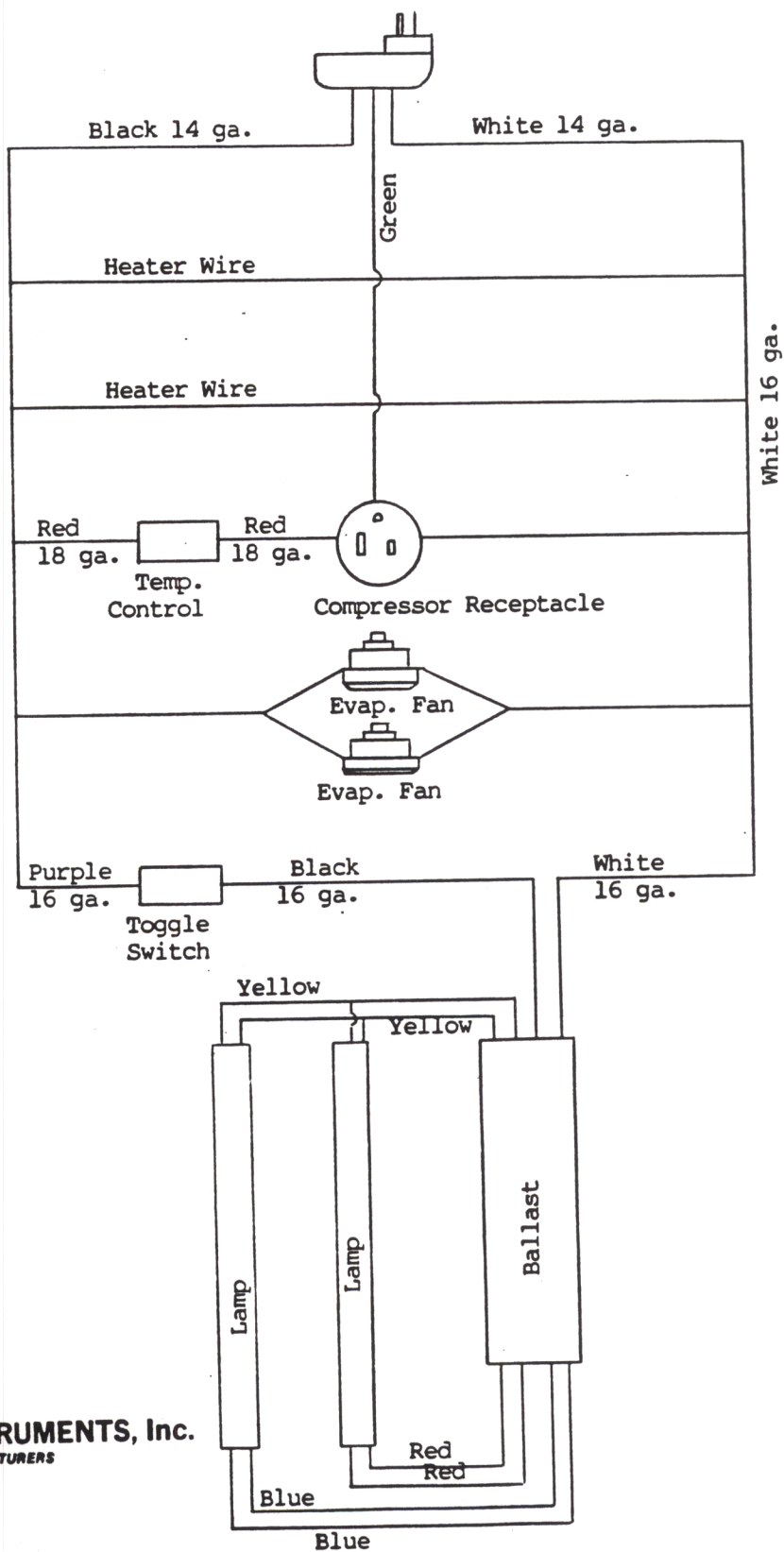
8. IT IS THE RESPONSIBILITY OF THE PURCHASER TO FURNISH ADEQUATE WIRING THAT WILL ALLOW THE COMPRESSOR TO OPERATE WITHOUT VOLTAGE LOSS.

...Compressor warranties are void if the compressor is more than 7 feet from plug-in connection.

...Compressor warranties are void if the compressor burns out because of low voltage.

 * DANGER: Do not use in the presence of flammable or combustible *
* materials or explosive gases. Fire or explosion may result, *
* causing death or severe injury. *

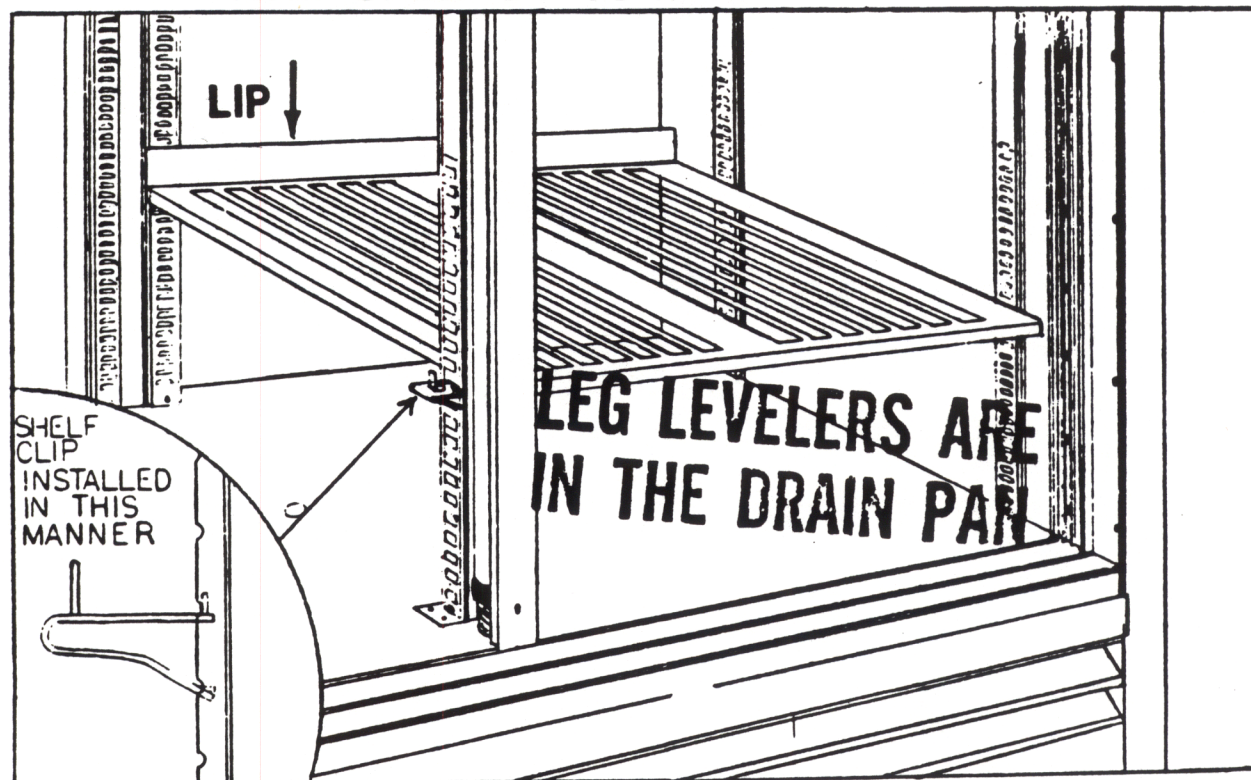
WIRING



LAB-LINE INSTRUMENTS, Inc.
DESIGNERS AND MANUFACTURERS
MELROSE PARK, ILL.

INSTALLATION

KEEP SHELF LIP TO REAR



WARRANTY

LAB-LINE INSTRUMENTS, Inc., for itself and all of its subsidiaries ("Lab-Line"), does hereby warrant for a period of 15 months from the date of receipt by the User, under normal and proper usage, all of its products (except P.A.C.E. anaerobic chambers) against defects in workmanship and material, and will repair or replace any defective part(s) without charge when same is shipped prepaid to the authorized Lab-Line distributor from which the product was originally purchased. P.A.C.E. anaerobic chambers are warranted for a period of 12 months, except the vinyl front panel and rubber sleeves/ gloves which are warranted for 30 days, from the date of receipt by the User.

Should the nature of any defect require that the product or any constituent portion thereof be returned by such authorized distributor to Lab-Line's factory at Melrose Park, Illinois, prepaid, for service, a condition precedent to any return shall be the procurement by such dealer of written authorization from Lab-Line assigning a Return Goods Number to the product or part requiring service.

Parts and accessories manufactured by others are warranted only to the extent of the regular warranty of the manufacturer or supplier of such materials and only insofar as Lab-Line is able to transfer the benefits of warranty coverage, if any, to the User. Any adequately warranted defective part or accessory manufactured or supplied by others may be exchanged through an authorized Lab-Line dealer for a replacement part, and no charge in respect thereof shall be assessed if the defective part is shipped prepaid and received at Lab-Line's factory within 30 days from the date any replacement part is obtained by the User.

This warranty supersedes and is given in lieu of all implied warranties, and is void if the User does not provide the unit with continuous ample electrical power at constant voltage, consistent with the specifications of the product.

With respect to all Explosion-Proof and Flammable Material Storage (FMS) Refrigerators and Freezers, storage by User of any materials in the product which may cause deterioration of any components of the product shall be deemed to constitute abnormal and improper usage for the purposes of this warranty.

TO OBTAIN THE BENEFITS CONFERRED BY THIS WARRANTY, USER MUST RETURN THE WARRANTY CARD TO LAB-LINE WITHIN SEVEN (7) BUSINESS DAYS AFTER RECEIPT OF THE PRODUCT.

LAB-LINE INSTRUMENTS, Inc.
(and all of its subsidiaries)



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SINCE 1908